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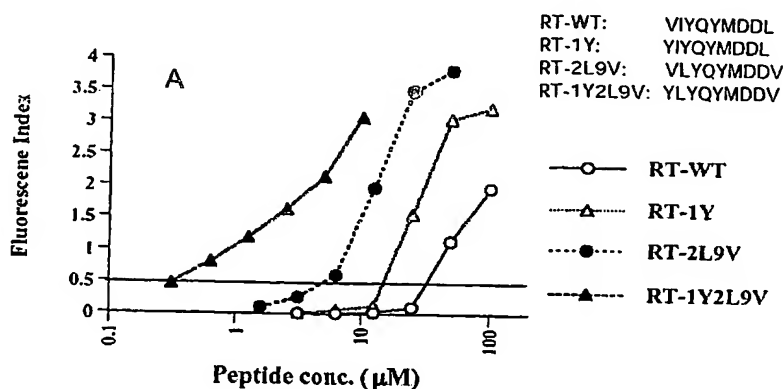
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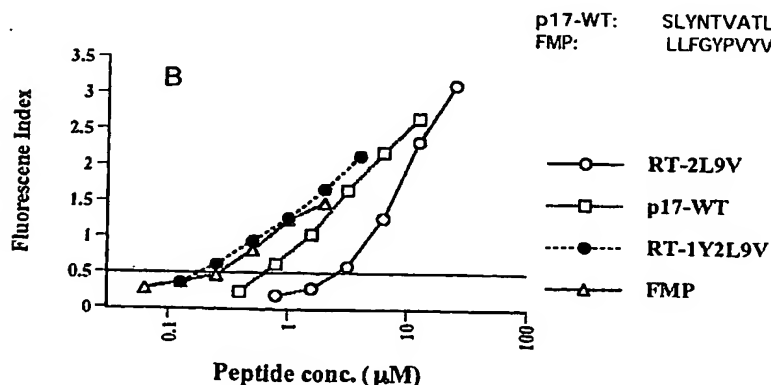
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- (71) Applicant (for all designated States except US): **THE GOVERNMENT OF THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF THE DEPARTMENT OF HEALTH AND**
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **BERZOFSKY, Jay, A. [US/US]; 5908 Bradley Blvd., Bethesda, Maryland 20814-1107 (US). OKAZAKI, Takahiro [JP/JP]; C-2 Fujishirohatsu, 698-7 Ohbacho, Aobaku, Yokohama 225-0023 (JP).**
- (74) Agents: **GAO, Chuan et al.; Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, California 94111 (US).**
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(54) Title: **ENHANCED HIV-1 VACCINES AND METHODS FOR THEIR USE**



(57) Abstract: **ENHANCED HIV-1 VACCINES AND METHODS FOR THEIR USE** The present invention provides peptides and proteins for use in second generation HIV vaccines and as diagnostic tools in the treatment and control of HIV infection. The antiviral protection shown by compositions of the present invention has not been previously achieved with an HLA epitope-enhanced vaccine. These findings define a critical balance between MHC affinity and receptor crossreactivity required for effective epitope enhancement and also demonstrate construction and efficacy of such a component of a new generation vaccine.





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